

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (currently amended): A self-protecting barrier system for retarding fire comprising:

a fire-retardant barrier having a water-permeable ~~and substantially unburned~~ first fabric covering a substantial area ;

said first fabric having a surface and said fire-retardant barrier having at least 9 pockets per square foot, each pocket having a volumetric capacity of between about 0.03 cubic inches and about 17 cubic inches, wherein substantially all of said pockets contain ~~hydrated~~ superabsorbent polymer in the amount of between about 0.01 and about 2 grams unhydrated weight of superabsorbent polymer per cubic inch of said volumetric capacity of said pockets; and

~~said hydrated superabsorbent polymer having a temperature of about 100-°C;~~

said ~~hydrated~~ superabsorbent polymer upon hydration with water forming a substantially continuous matrix of hydrated superabsorbent polymer which substantially ~~filling fills~~ said volumetric capacity of said pockets; ~~a fire adjacent said surface of said first fabric; and~~

~~a first layer of steam at said surface of said first fabric and between said surface of said first fabric and said fire.~~

Claim 2 (previously presented): A self-protecting barrier system according to claim 1, wherein said superabsorbent polymer is a polyacrylate or a polyacrylate derivative.

Claim 3 (previously presented): A self-protecting barrier system according to claim 1, wherein said superabsorbent polymer is polyacrylamide.

Claim 4 (previously presented): A self-protecting barrier system according to claim 1, wherein each one of said pockets when the superabsorbent polymer is unhydrated is

between about ½ inch and about 5 inches long and between about ½ inch and about 5 inches wide.

Claim 5 (previously presented): A self-protecting barrier system according to claim 1, where each of said pockets holds between about 0.005 grams and about 3 grams unhydrated weight of said superabsorbent polymer.

Claim 6 (canceled)

Claim 7 (canceled)

Claim 8 (canceled)

Claim 9 (canceled)

Claim 10 (currently amended): A self-protecting ~~fire-retardant~~ barrier system ~~according to claim 1, further~~ comprising:

a fire-retardant barrier having a water-permeable first fabric covering a substantial area ;

said first fabric having a surface and said fire-retardant barrier having at least 9 pockets per square foot, each pocket having a volumetric capacity of between about 0.03 cubic inches and about 17 cubic inches, wherein substantially all of said pockets contain superabsorbent polymer in the amount of between about 0.01 and about 2 grams unhydrated weight of superabsorbent polymer per cubic inch of said volumetric capacity of said pockets,

said superabsorbent polymer upon hydration with water substantially filling said volumetric capacity of said pockets and

a second fire-retardant barrier and means for fastening said fire-retardant barrier to a said second fire-retardant barrier.

Claim 11 (currently amended): A self-protecting ~~fire-retardant~~ barrier system ~~according to claim 1, further~~ comprising:

a fire-retardant barrier having a water-permeable first fabric covering a substantial area ;

said first fabric having a surface and said fire-retardant barrier having at least 9 pockets per square foot, each pocket having a volumetric capacity of between about 0.03 cubic inches and about 17 cubic inches, wherein substantially all of said pockets contain superabsorbent polymer in the amount of between about 0.01 and about 2 grams unhydrated weight of superabsorbent polymer per cubic inch of said volumetric capacity of said pockets;

said superabsorbent polymer upon hydration with water substantially filling said volumetric capacity of said pockets, and

a second fire-retardant barrier and fasteners for fastening said fire-retardant barrier to a said second fire-retardant barrier.

Claim 12 (currently amended): A self-protecting ~~fire-retardant~~ barrier system according to claim 1, further comprising:

~~a building adjacent said fire-retardant barrier opposite said layer of steam and~~
means for capable of fastening said fire-retardant barrier to ~~said a~~ building.

Claim 13 (currently amended): A self-protecting ~~fire-retardant~~ barrier system according to claim 1, further comprising:

~~a building adjacent said fire-retardant barrier opposite said first layer of steam and~~
fasteners for capable of fastening said fire-retardant barrier to ~~said a~~ building.

Claim 14 (previously presented): A self-protecting barrier for retarding fire, comprising:

a plurality of pockets connected together to cover a substantial area;
wherein each one of said plurality of pockets has a a first fabric layer and a second fabric layer, wherein said first fabric layer is water-permeable, and a cavity disposed between said first and second fabric layers, said cavity having a capacity of between about 0.03 cubic inches and about 17 cubic inches;

wherein substantially all of said plurality of pockets are substantially slack and hold substantially only loose superabsorbent polymer in the amount of between about

0.01 and about 2 grams of said superabsorbent polymer per cubic inch of volumetric capacity.

Claim 15 (previously presented): A method of retarding fire from burning an object, comprising the steps of:

providing a plurality of self-protecting fire-retardant barriers, each having water-permeable fabric, said fabric having at least 9 pockets per square foot, each pocket having a volumetric capacity of between about 0.03 cubic inches and about 17 cubic inches, wherein substantially all of said pockets contain between about 0.01 and about 2 grams of superabsorbent polymer per cubic inch of said volumetric capacity of said pockets;

covering substantially all of said object with said plurality of self-protecting fire-retardant barriers; and

hydrating said superabsorbent polymer in each one of said plurality of self-protecting fire-retardant barriers with a sufficient amount of water to expand said superabsorbent polymer to substantially fill said volumetric capacity with a substantially continuous matrix of hydrated superabsorbent polymer and push said pockets out to tautness.

Claim 16 (previously presented): A method according to claim 15, further comprising the step of fastening said plurality of self-protecting fire-retardant barriers together for covering substantially all of said object.

Claim 17 (currently amended): A method according to claim 15, further comprising the step of evaporating or boiling a portion of said water of said substantially ~~continuous~~ continuous matrix of hydrated superabsorbent polymer at a temperature of about 100 °C to form a steam layer at a surface of said barriers for protecting said barriers from a fire.

Claim 18 (previously presented): A method according to claim 17, further comprising the step of quenching fire with said steam layer.

Claim 19 (currently amended): A self-protecting ~~fire-retardant~~ barrier system according to claim 10, wherein said first fabric is porous, ~~hydrophillic~~ hydrophilic and flammable and said superabsorbent polymer is a polyacrylate or a polyacrylate derivative.

Claim 20 (currently amended): A self-protecting ~~fire-retardant~~ barrier system according to claim 10, wherein said first fabric is porous, ~~hydrophilic~~ hydrophilic and flammable and said superabsorbent polymer is polyacrylamide.

Claim 21-24 (canceled)

Claim 25 (currently amended): A self-protecting ~~fire-retardant~~ barrier system according to claim 11, wherein said first fabric is porous, hydrophilic and flammable and said superabsorbent polymer is a polyacrylate or a polyacrylate derivative.

Claim 26 (currently amended): A self-protecting ~~fire-retardant~~ barrier system according to claim 11, wherein said first fabric is porous, hydrophilic and flammable and said superabsorbent polymer is polyacrylamide.

Claim 27- 30 (canceled)

Claim 31 (currently amended): A self-protecting ~~fire-retardant~~ barrier system according to claim 12, wherein said first fabric is porous, hydrophilic and flammable and said superabsorbent polymer is a polyacrylate or a polyacrylate derivative.

Claim 32 (currently amended): A self-protecting ~~fire-retardant~~ barrier system according to claim 12, wherein said first fabric is porous, hydrophilic and flammable and said superabsorbent polymer is polyacrylamide.

Claim 33-36 (canceled)

Claim 37 (currently amended): A self-protecting ~~fire-retardant~~ barrier system according to claim 13, wherein said first fabric is porous, hydrophilic and flammable and said superabsorbent polymer is a polyacrylate or a polyacrylate derivative.

Claim 38 (currently amended): A self-protecting ~~fire-retardant~~ barrier system according to claim 13, wherein said first fabric is porous, hydrophilic and flammable and said superabsorbent polymer is polyacrylamide.

Claim 39- 42 (canceled)

Claim 43 (currently amended): A self-protecting ~~fire-retardant~~ barrier according to claim 14, wherein said first fabric is porous, hydrophilic and flammable and said superabsorbent polymer is a polyacrylate or a polyacrylate derivative.

Claim 44 (currently amended): A self-protecting ~~fire-retardant~~ barrier according to claim 14, wherein said first fabric is porous, hydrophilic and flammable and said superabsorbent polymer is polyacrylamide.

Claim 45 (currently amended): A self-protecting ~~fire-retardant~~ barrier according to claim 14, wherein each one of said pockets is between about ½ inch and about 5 inches long and between about ½ inch and about 5 inches wide.

Claim 46 (currently amended): A self-protecting ~~fire-retardant~~ barrier according to claim 14, where each of said pockets holds between about 0.005 grams and about 3 grams of said superabsorbent polymer.

Claim 47 (canceled)

Claim 48 (currently amended): A self-protecting ~~fire-retardant~~ barrier according to claim 14, wherein said second fabric layer is water-permeable.

Claim 49 (currently amended): A method of isolating fuel from the flames of a fire, comprising the steps of:

providing at least one self-protecting fire-retardant barrier between said fuel and said flames, said barrier having a first surface facing and exposed to said flames formed of a water-permeable fabric, said fabric having at least 9 pockets per square foot, each pocket having a volumetric capacity of between about 0.03 cubic inches and about 17 cubic inches, wherein substantially all of said pockets contain a substantially continuous matrix of water and hydrated superabsorbent polymer in the amount of between about 0.01 and about 2 grams unhydrated weight of superabsorbent polymer per cubic inch of said volumetric capacity of said pockets, said superabsorbent polymer being hydrated with said water;

~~volatizing~~ volatilizing a portion of said water at a temperature of about 100 °C. to form a steam layer at said first surface of said barrier; and
detering ignition of said fabric and preventing said flames from reaching said fuel by substantially extinguishing said flames with said ~~first~~ steam layer.

Claim 50 (previously presented): A method according to claim 49, further including the steps of dissipating said steam layer, and then removing said barrier.

Claim 51 (canceled)